

IN THE SPECIFICATION

Presented below are specification changes showing the changes made.

Please replace the paragraph on page 13, line 25 through page 14, line 12 with the following paragraph:

C1 Referring to **Figure 2b** and block 600 of **Figure 3**, the active ROM and the standby RAM (e.g., ROM 104 and RAM 502, respectively), are loaded with an image of the updated release of the operating code, version 9.2.00, using a protocol such as the trivial file transfer protocol (TFTP). The loaded image contains all code needed for the operation of switch 50, which includes code needed to upgrade the databases contained in switch 50. The configuration databases in RAM 502 are cleared by the loading of the new software image. The old versions of the databases are flushed from RAM 502 because these databases are not fully compatible with the new software. As described above, incompatibilities between the old versions of the databases and the new operating code are due to changes in the schema of the new databases and changes in the new operating code to operate with the new formats.

Replace the paragraph on page 16, line 25 through page 17 line 16 with the following paragraph:

Whether there ~~is~~ are one or several update messages generated for each database to be updated is a design decision by the implementers of each database. In some cases one update message is used for the whole database (e.g., the update message contains all the database records for a database), in others the database is sent over in several update messages (e.g., the update message contains a portion of the database records for a database). The decision usually depends on the size and structure of the database, with consideration for the need to have as little loss of data as possible. In addition, whether the schema of a database in the set of databases changes between different releases of software is also an implementation decision. Thus, a new release of the software image does not necessarily mean that there is a new version of a database schema for any of the databases. In the explanation given herein, however, it is assumed that the databases schemas are changed with each release. Specifically, a different release of the software image has a different version of the database schema for at least one database.

Replace the paragraph on page 19, line 1-19 with the following paragraph:

In block 302 of **Figure 6**, the new release of the code, version 9.2.00, in ROM 104 is loaded into RAM 102. At this point, the configuration databases in RAM 102 are cleared by the loading of the new software image. The old versions of the databases are flushed from RAM 102 because these databases are not fully

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compatible with the new software. Incompatibilities between the old versions of the databases and the new operating code are due to changes in the formats of the new databases and changes in the new operating code to operate with the new formats. During the upgrade of switch 50, significant service outage in switch 50 occurs and may last from minutes to hours, depending on the amount of provisioning. Outage occurs due to the lack of a redundant controller card in this embodiment of switch 50 to continue operation when all code and databases in RAM 102 are cleared after the uploading of the image of the new software. The state of memory system 100 after block 302 has completed is shown in **Figure 5c**. Nothing of the old release of the software image is preserved in switch 50 past the loading of the new image into RAM 102--except for the configuration databases in BRAM 106.
